Data Sheet

1. Product Description
3M™ Wire Pulling Lubricant Wax is a gray wax based emulsion which has excellent lubricating properties for smooth low tension wire and cable pulling.

Wire Pulling Lubricant Wax Features:
The 3M wire lubricant provides a smooth and low tension wire and cable pulls and is comparable to other pulling lubricants.
• UL Listed for U.S. and Canada File E162404
• Compatible with a wide range of cable jackets.
• Compatible with semi-conducting materials.
• Temperature stable. This lubricant can endure warehouse storage temperatures without phase separation and with minimal viscosity changes. Tested from 10˚ F - 194˚ F with no phase separation.
• Low solids content means less cable blocking.
• Stays on cable when pulling through water filled conduits.

2. Applications
3M Wire Pulling Lubricant Wax is suitable for pulling a wide variety of cables types. These include power, control, instrumentation and communication cables.

3. Data: Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Gray</td>
</tr>
<tr>
<td>Percent Solids</td>
<td>5.3%</td>
</tr>
<tr>
<td>Viscosity</td>
<td>71,000 cps</td>
</tr>
<tr>
<td>pH</td>
<td>6.5 - 8.0</td>
</tr>
</tbody>
</table>

4. Specifications

Product
The lubricant shall be a gray wax emulsion capable of use above 32˚ F and warehouse storage conditions of 10˚ F - 194˚ F. The lubricant must yield smooth and low tension pulls and have no adverse affects on the electrical or physical properties of the cables. Lubricant shall be UL Listed.

Engineering/Architectural
The lubricant shall be 3M Wire Pulling Lubricant Wax. The lubricant shall be a gray wax based material and must be compatible with a wide variety of cable jacketing and semi-conducting materials. The lubricant shall be unaffected by normal warehouse storage conditions.

5. Installation Techniques
The lubricant needs to reach all points where the cable and conduit rub together, to obtain optimum tension reduction. Normal application is by hand wiping on the cable jackets as the cable is pulled into the conduit. The cable will generally carry enough lubricant to complete an average pull. If cable pulls are long or difficult, inject extra lubricant directly into the conduit ahead of the cable, in addition to wiping on the cable jacket.

The amount of lubricant needed can vary greatly depending on the difficulty of the pull. A general formula to determine application rates for a normal pull is:

$$\text{Quantity (gallons)} = 0.0015 \times L \times D$$

L = length of pull in feet
D = diameter of conduit in inches (approximately 3/4 gallon per 100 ft. of 5” conduit).

6. Maintenance
3M Wire Pulling Lubricant Wax is unimpaired by normal warehouse storage conditions. Open containers should be tightly resealed to prevent evaporation of the material.

7. Availability
3M Wire Pulling Lubricant Wax is available in 4 sizes from your local authorized 3M electrical distributor.

<table>
<thead>
<tr>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WLX-QT</td>
<td>1 qt. squeeze bottle</td>
</tr>
<tr>
<td>WLX-1</td>
<td>1 gallon pail</td>
</tr>
<tr>
<td>WLX-5</td>
<td>5 gallon pail</td>
</tr>
<tr>
<td>WLX-55</td>
<td>55 gallon drum (special order only)</td>
</tr>
</tbody>
</table>

Material Safety Data Sheets (MSDS) are available from 3M or your local authorized 3M electrical distributor.
IMPORTANT NOTICE

Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use.

Warranty; Limited Remedy; Limited Liability. This product will be free from defects in material and manufacture as of the date of purchase. 3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M’s option, to replace or repair the 3M product or refund the purchase price of the 3M product. Except where prohibited by law, 3M will not be liable for any loss or damage arising from this 3M product, whether direct, indirect, special, incidental or consequential regardless of the legal theory asserted.

3M

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